TIMELY TURF TOPICS

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BETTER TURF FOR EVERY PURPOSE

POA ANNUA: Annual bluegrass is prevalent throughout northern turf areas and is the subject of much discussion. When Poa annua is at its best the golfers say, "This is perfect - just what we want." When it dies in midsummer they say, "What's wrong with the greenkeeper?" The habits of this plant are not well understood by many. For this reason the Green Section recommends a review of "Annual Bluegrass (Poa annua L.), and its Requirements for Growth," by H. B. Sprague and G. W. Burton, Bulletin 630, September, 1937, New Jersey Agricultural Experiment Station, New Brunswick, New Jersey. Dr. Ahlgren and Dr. Longnecker at New Brunswick have assured us that copies of this bulletin will be sent to anyone requesting it.

The Green Section recommends Bulletin 630 as the most comprehensive literature on the subject to date.

Poa annua has been kept out of bentgrass putting greens by practical golf course superintendents and greenkeepers by

1. the use of vigorous, aggressive bents which start growth early in the spring, and by sound management practices which maintain vigor and aggressiveness;
2. employing good fertilizer practices, using sufficient balanced fertilizers at the proper time to maintain healthy, vigorous growth, which prevents the invasion of Poa annua;
3. careful watering to promote deep root systems, which results in sturdier turf;
4. the use of coarse, porous soils and topdressing materials to promote maximum drainage and aeration;
5. The generous use of arsenate of lead at intervals to discourage the growth of Poa annua. This practice has been successful on many courses.

Fairways present a different problem. Poa annua is an invader principally of watered fairways. It seems to be the "in-between" grass after the bluegrasses and fescues disappear and before the bentgrasses take over. The growth requirements of Poa annua and bentgrasses are quite similar. The control of Poa annua on fairways appears to be a combination of water control, the use of arsenical weedkillers, and the increased use of bentgrass in reseeding following renovation, in addition to improved soil conditions for encouraging a deeper rooting of the desirable grasses. The need for superior types of bentgrasses adapted to fairway use is keenly felt in relation to the Poa annua problem. There is no simple, direct answer at present to the problem as a whole.

TALL FESCUE: A relative newcomer on the turf horizon is Alta fescue, a selected strain from tall fescue (Festuca elatior var. arundinacea). Alta fescue was developed at Corvallis, Oregon, about 1928 by H. A. Schoth, Agronomist for the United States Department of Agriculture. This grass has been investigated extensively for forage purposes but aside from its uses in Oregon for forage, seed production, roadsides, school grounds and airfields, its use in other parts of the country for turf has been limited primarily to test plots for forage, on highways, and to a few airfield seedings in Pennsylvania and Indiana.

The range of adaptation of Alta fescue is the widest of any grass tested with it. It has been grown successfully from Canada to Florida and in practically every state across the nation where rainfall is sufficient to support crop growth. It is virtually immune to all grass diseases and is extremely drought-heat-and-cold-tolerant. It maintains a good green color the year round and starts spring growth very early in the northern latitudes. The foliage is dark green and presents a pleasing appearance. The foliage is surprisingly similar to that of Zoysia japonica during the summer season.

Alta fescue is classed as a bunch grass but it tends to form a dense, well-knitted sod, free from clumps or bunches. The foliage is coarse and may not be desirable for use on lawns, fairways, and other closely-mown turf. It appears to have its greatest possibilities for roadsides, airfields, athletic fields, drill grounds, parade grounds, turfed parking lots, and other areas where fine texture is not required but where there is a premium on toughness, deep rooting, resistance to wear, and low-cost maintenance. Seed stalks which grow 3 to 4 feet high, if left unclipped, are produced in May and June. At Beltsville, Maryland, a 4-inch mowing height has produced a turf superior to either a 2-inch or an 8-inch height, all other conditions being equal.

The Green Section and the Bureau of Plant Industry cooperatively are investigating the various turf uses and growth requirements of Alta fescue. Seed supplies have been short because of a heavy demand but adequate supplies are expected this fall. Prices are lower than those for bluegrass. Trial plots are being established on airfields, golf course roughs, athletic fields, roadsides, and other turf areas. Inquiries on this grass are invited. Samples for trial plantings are available.

TEXAS-OKLAHOMA TURF CLINICS: From 5 to 18 August a series of turf clinics was held in Texas and Oklahoma, covering the districts of Houston, San Antonio, Kilgore, Dallas, Fort Worth, Texarkana, Odessa, El Paso, Lubbock, Amarillo, Oklahoma City, and Tulsa. Fred V. Grau, Director, and O. J. Noer, Member of the Green Section Committee, made the entire trip, which was conceived, planned, and executed jointly by Howard and Frank Goldthwaite and Bob Dunning. Marvin Ferguson, turf representative of the Bureau of Plant Industry, assisted as far as Fort Worth.

The trip from Houston through to Tulsa covered over 3,000 miles. Ten clinics were held, with over 300 people attending, representing about 100 golf courses, several city parks, cemeteries, airfields, and athletic fields. Forty golf courses were visited and inspected, in addition to several parks, cemeteries, and airfields. Lawn conditions were noted likewise.

The principal objectives of the trip were to

1. get acquainted
2. study turf conditions
3. build USGA membership
4. expand USGA Green Section activities
5. assist in developing strong state turf programs, including turf conferences and advisory service.

The accomplishments which may be noted are:

1. Selection of a state-wide Turf Advisory Committee in each state, representing all phases of turf, to assist in developing a turf improvement organization and setting up a turf conference in cooperation with the A. & M. College in each state, with the full assistance and backing of the USGA Green Section.

Members of the Texas Turf Advisory Committee are

Willie Maguire	- Houston
Ben Strickland	- Houston
Tod Menefee	- San Antonio
Ralph W. Morgan	- Tyler
Graham Ross	- Dallas
Wells Howard	- Fort Worth
H. T. (Shorty) Hornbuckle	- Odessa
Jimmy Gamewell	- Hobbs, New Mexico
Jack Harden	- El Paso
Morgan Hampton	- Abilene

Members of the Oklahoma Turf Advisory Committee are:

Oklahoma City	Tulsa
Ben Owen	Bob Erwine
Art Jackson	T. R. McCaslin
Harold Butler	Bob Dunning
Bill Gober	Alex A. Repin
O. T. Glidewell	John Price

2. Better understanding of Green Section aims and objectives, and greatly increased interests in USGA memberships.
3. Better understanding of several basic principles of turf production.

General observations covering the trip may be summarized in a few categories:

1. Improvement of physical soil conditions is needed on most putting greens by the use of larger quantities of coarse, sharp sand, and reed and sedge peat, to achieve greater porosity, better drainage, and aeration. The use of very fine blow sand and manure should be discouraged.
2. Sterilization of topdressing is needed to prevent the introduction of weed seeds. Weeds on bentgrass greens include crabgrass, goose grass, Bermuda grass, and milk purslane.
3. Prevention of tree roots in putting greens by the method of trenching deeply and lining the trench with sheet metal or layers of tar paper, as described by O. J. Noer in the Fall, 1945, number of Golfdom.
4. Reduction in quantities of topdressing used, and limiting topdressing to cool weather.
5. More adequate fertilization practices on both bent and Bermuda greens.
6. More vigorous and more frequent brushing or raking of putting greens to avoid formation of matted grass. This applies to bent and Bermuda alike.
7. More adequate watering of collars (froghair) around greens to prevent drying of edges.

   It is of interest that, through West Texas and Oklahoma, Bermuda greens have been fully converted to bent greens by seeding seaside bent into the Bermuda and by carefully managing the bent throughout the summer. Diseases are virtually unknown on the bents in the dry climate of Odessa and Amarillo.
8. Most fairways suffer from malnutrition and lack of moisture. Much heavier fertilization than has been the practice, especially in the case of nitrogen, is required to build good fairway turf because of the rapid loss of nitrogen and the high requirements of most southern grasses for this element. Watering is essential in the arid sections.
9. Buffalo grass and Bermuda grass represent the two most useful fairway grasses. Fertility and water requirements and frequency of mowing are much higher for Bermuda grass. Combinations of the two appear promising.
10. Reconversion of ryegrass to Bermuda on putting greens in the spring may be hastened with more satisfactory results by (1) heavy fertilization with copius water (2) a period of drying to kill ryegrass (3) spiking, topdressing, and reseeding with hulled Bermuda.

The establishment of an annual turf conference is believed to be the key to the development of a sound turf program in the Southwest. From this the research and the service programs will develop naturally on a broad front covering every phase of turf improvement. The principles of turf production learned through the intensive management of grass on golf courses can thus be made to serve the broad national program of turf improvement.